

flammatory processes arising about the necks of the pouches.

The findings of the roentgenologist are, therefore, very definite and are the only means of making a diagnosis unless diverticula are found during an abdominal operation.

Diverticula occur principally in the descending and pelvic colon, but may be found anywhere in the large bowel, and the appendix is not infrequently the seat of these pouches where they may produce symptoms resembling those of chronic appendicitis. Also it is not improbable, as Moynihan² remarks, that multiple rectal fistulae may be due to infection and rupture of rectal diverticula. Simple diverticula give rise to vague abdominal distress or gaseous distention in some part of the colon with some tenderness over the bowel, and these symptoms are accompanied or exaggerated by constipation. Diverticulous patients are on the average over fifty years of age. Treatment consists in prevention of infection of the pouches by removing systemic foci of infection, keeping the bowel evacuated by saline enemata and liquid petroleum and setting the somewhat spastic bowel at rest with atropin. An abdominal belt is useful, but massage of the abdomen should never be practiced.

Should diverticulitis supervene it will manifest itself as:

1. A "left-sided appendix" (acute infection of a pouch).
2. Peridiverticulitis, a hyperplastic inflammatory reaction around a number of diverticula producing a thickening of the bowel resembling carcinoma of the colon.
3. Inflammatory cicatrization of the diverticulous area producing stenosis and obstruction.
4. Abscess formation from localized penetration.
5. Perforation and peritonitis.
6. Perforation and fistulae formation of which vesicocolic fistulae are the commonest.

These secondary results may be retarded or even prevented by careful hygiene of the colon during the prediverticular or diverticular stage.

M. S. WOOLF, San Francisco.

REFERENCES

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Orthopedics

Heliotherapy in Joint Tuberculosis—Allison¹ has investigated this subject with his usual thoroughness, he having apparently visited the various centers in Europe, where the treatment is carried on most enthusiastically. He and his associates have practiced heliotherapy at the Peabody Home near Boston for a number of years.

Allison, who has done remarkable research work in bone tuberculosis, accepts the claims of

brilliant cures by Rollier, Gauvain, and others, but leaves the reader in doubt as to his own faith in the treatment, and as to just what it accomplishes, and how. He says: "Heliotherapy, therefore, to our minds is a composite of many things which are aside from the light element, not in any way connected with the sun's rays." Others are not so cautious. They ascribe the cure directly to the sun's rays, and even specify as to which rays of the spectrum work the cure. According to one writer the short rays of the spectrum are the beneficial ones; according to another, the long rays. One says that the pigment of the skin keeps out the harmful rays, another says that it allows penetration of the healing rays.

Rollier, of course, maintains that the best results are to be obtained at the altitude where his sanitarium is located. The unregenerate inquires how many altitudes he tried before finding the correct one, or what chance helped him to find the exact spot at the first attempt. Allison believes that Gauvain gets as good results as Rollier at a less altitude. It is hard to tell exactly where the truth lies when authorities differ.

The point is, what shall we in California do with our tuberculous joints? We have such a range of climate and such difference in altitude that the decision of the proper place for treatment is difficult. Most of us have been unable to verify Rollier's claims. Possibly the safest way is to send all patients to Rollier, for his statistics are best.

For those unable to go on account of financial reasons, we can offer the following facts and theories in the line of consideration: Many sure cures have been promulgated for joint tuberculosis in the past thirty or forty years. Our perspective will improve if we look some of them over.

The most logical treatment is the operative treatment. If we clean out all the diseased tissue, and provide by drainage for the eventual exit of the rest, we would seem to be on the right track. At one time this was standard therapy, but it killed with such regularity that its vogue has almost passed. So bad were its results that many surgeons resorted to amputation as soon as they made the diagnosis of tuberculosis. Most of us would like to try something else first.

The injection treatment of tuberculous joints we always have with us. It is endemic, but when some investigator promulgates a new substance for injection or some new method of employing an old substance, this treatment becomes epidemic. Some years ago I searched the journals for references on the injection treatment since Mikulicz first advocated iodoform in 1881. Here are some of them: bone charcoal, iodine, phenol, arsenious acid and corrosive sublimate, acidulated solution of calcium sulphate, zinc chlorid, balsam of Peru, naphthol camphor, and formaldehyd solution. At present the injection treatment is not in good

repute, but we may safely prophesy a recrudescence before long.

The tuberculin treatment was brought out with a great flourish of trumpets. I believe it is still employed in some quarters, though it has been rather generally discredited.

Some twenty-five years or so ago Calot extolled the healing powers of salt water, combined with certain special plaster of Paris dressings, and if necessary, injection of certain substances into the cold abscess. Calot had quite a vogue. Hospitals were established at the seashore in many places. I had the luck to be in charge of the hospital at Coney Island for a number of years. Our patients had the best of food and care, and generally did well, but the joint tuberculosis ran its accustomed course. To San Franciscans, Calot's treatment will bring back fond memories of Salt Water Keck.

In a state medical meeting I have heard a man of some local prominence detail his cure of joint tuberculosis by painting with iodine, and by adhesive tape.

In the old days bitter fights were waged in orthopedic circles over the respective merits of braces and plaster of Paris. Those who advocated braces differed as to whether the apparatus should simply immobilize, draw the joint surfaces apart and immobilize, or draw them apart and allow motion—motion without friction, as it was called. The main thing was to devise some apparatus with some new gadget which helped in some mysterious way to cure the tuberculous joint.

All these cures had one thing in common: they were based on the clinical opinion of their originator, and no facts supported them except the before and after picture. Peruna has that. However, there is no particular reason why one should not try these various treatments as they come out, if one wishes. Occasionally one stumbles on the truth in that way.

If we are unwilling to pursue the hit or miss course, it might be well for us to demand of the advocate of a new treatment for tuberculous joints the same proof we demand in the case of other organs. If one appeared before a medical society claiming that one could cure endocarditis by injecting something into the blood stream, or appendicitis with sunlight, one would excite derision. It might be true, of course, but some proof besides photographs and case histories would be necessary.

If heliotherapy cures tuberculosis of joints, it should be easy to demonstrate the fact in animals. In all the years of its profitable exploitation this has never been done. Some of the same photographs of miraculously cured patients have been used year after year in different articles, and not one word of proof as to the correctness of the diagnosis, or positive examinations of tissues, or

guinea-pig tests, has been submitted. If there is one thing established by careful investigation, it is that a diagnosis of joint tuberculosis without the demonstration of the tubercle bacillus cannot be made. If any clever surgeon doubts this let him take his operative material to the laboratory and look it over.

If he will do that he will learn much more than the fallibility of his diagnosis, for instance this fact: that everything which takes place in and about a tuberculous joint can be interpreted as nature's effort to cure it by destroying function. If he is wise he will imitate nature in his therapeutic efforts, and will view wonder cures with doubting eyes.

LEONARD W. ELY, San Francisco.

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Urology

Chronic Prostatitis—Chronic prostatitis is an exceedingly common disease. It is usually accompanied by vesiculitis. From the resulting prostatovesiculitis much of the pain and worry of man arises.

There are two types: the infective, an aftermath of a gonorrheal infection, and the so-called "aseptic" type, which is more a congestion of the prostate and vesicles than an infection. The latter condition is much more prevalent than is ordinarily supposed, 15 to 25 per cent of cases of prostatitis being non-venereal in origin.¹ Sexual excitement without relief of congestion by a subsequent ejaculation is a frequent cause.² Sexual excesses, especially when accompanied by over-indulgence in alcohol, masturbation, withdrawal, and other sexual irregularities, will produce this aseptic prostatitis.

Rectal palpation in the chronically infected prostate reveals small hard areas of induration with softer areas between; vesicles are hardened and distended. In the "aseptic" prostatitis the congested prostate is quite large, boggy, and tender, and the vesicles are distended and often tense.

The symptoms of prostatovesiculitis are many and range from a slight "morning drop" and shreds in the urine, to nervous exhaustion. Back pain is the most pronounced and constant symptom, being present in 70 per cent of cases,³ and the examination of a patient with this complaint is never complete without a thorough check of the prostate and vesicles.⁴ Player found that 25 per cent of cases of backache were due to prostatovesiculitis.³ In the majority of these cases the pain is referred, although a few are due to an arthritis, myositis, or sinusitis, with the prostate and vesicles acting as a focus. Inasmuch as the enervation of the prostate is sympathetic and para-